WE CLAIM:

1. A method comprising:

receiving a first read request from a computer system;

reading data from a first mirror of a data volume in response to receiving the first read request;

reading data from a second mirror of the data volume in response to receiving the first read request;

returning the data read from the first mirror to the computer system;

storing the data read from the second mirror into a cache memory;

receiving a second read request from the computer system, wherein the second read request is received subsequent to the first read request, and wherein the first and second read requests seek the same data;

returning data stored in the cache memory in response to receiving the second read request.

2. The method of claim 1 further comprising:

comparing an identification of data sought by the first read request with data identifications stored in a history of read requests in memory;

wherein data is read from the data volume in response to determining that the identification of data sought by the first read request does not compare equally with at least one data identification stored in the history of read requests.

3. The method of claim 2 further comprising creating a new entry in the history of read requests, wherein the entry comprises the identification of data sought by the first read request and the time the first request was received.

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4.   The method of claim 3 further comprising;

comparing the identification of data sought by the second read request with data

identifications stored in the history of read requests;

wherein data is returned from the cache memory in response to determining that the

identification of data sought by the second read request compares equally with

the data identification of the new entry.

5.   The method of claim 1 further comprising comparing time T1 with time T2, wherein time T1 is the time when the first read request was received, and wherein time T2 is the time when the second read request was received.

6.   The method of claim 5 further comprising returning the data stored in the cache memory in response to receiving the second request only if time T2 occurs within a predetermined amount of time after T1.

7.   The method of claim 5 further comprising:

the computer system processing the data read from the first mirror;

the computer system generating the second read request in response to determining

that the data read from the first mirror is corrupted.

8.   The method of claim 1 further comprising comparing the data read from the first and second mirrors wherein the data read from second mirror is stored into the cache memory if the data read from the first and second mirrors do not compare equally.

9.   A computer readable medium comprising instructions executable by a first computer system, wherein the first computer system performs a method in response to executing the instructions, the method comprising:

receiving a first read request from a computer system;

reading data from a first mirror of a data volume in response to receiving the first read

request;

reading data from a second mirror of the data volume in response to receiving the first

read request;

returning the data read from the first mirror to the computer system;

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storing the data read from the second mirror into a cache memory;

receiving a second read request from the computer system, wherein the second read request is received subsequent to the first read request, and wherein the first and second read requests seek the same data;

returning data stored in the cache memory in response to receiving the second read request.

10.   The computer readable medium of claim 9 wherein the method further comprises:

comparing an identification of data sought by the first read request with data identifications stored in a history of read requests in memory;

wherein data is read from the data volume in response to determining that the identification of data sought by the first read request does not compare equally with at least one data identification stored in the history of read requests.

11.   The computer readable medium of claim 10 further comprising creating a new entry in the history of read requests, wherein the entry comprises the identification of data sought by the first read request.

12.   The computer readable medium of claim 11 further comprising;

comparing the identification of data sought by the second read request with data identifications stored in the history of read requests;

wherein data is read from the cache memory in response to determining that the identification of data sought by the second read request compares equally with the data identification of the new entry.

13.   The computer readable medium of claim 9 further comprising comparing time T1 with time T2, wherein time T1 is the time when the first read request was received, and wherein time T2 is the time when the second read request was received.

14.   The computer readable medium of claim 13 further comprising reading the data stored in the cache memory in response to receiving the second request only if time T2 occurs within a predetermined amount of time after T1.

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15.   The computer readable medium of claim 13 further comprising:

the computer system processing the data read from the first mirror;

the compute system generating the second read request in response to determining

    that the data read from the first mirror is corrupted.

16.   The computer readable medium of claim 9 further comprising:

comparing the data read from the first and second mirrors wherein the data read from

    second mirror is stored into the cache memory if the data read from the first

    and second mirrors do not compare equally

17.   A computer readable medium comprising instructions executable by a first
computer system, wherein the first computer system performs a method in response to
executing the instructions, the method comprising:

    receiving a request for data from a computer system, wherein the data is identified by

      a unique name in the request;

    accessing a first mirror of a data volume to read the requested data or accessing a

      cache memory to read the requested data depending on whether the request

      from the computer system is an initial request for the data or a subsequent

      request for the data received after the initial request.

18.   A data processing system comprising;

a first computer system coupled to a memory system, wherein the memory system

    stores a data volume comprising a first mirror and a second mirror, wherein

    the first computer system comprises a memory for storing instructions

    executable by the first computer system, wherein the first computer system

    implements a method in response to executing the instructions, the method

    comprising:

receiving a first read request from a computer system;

reading data from the first mirror in response to receiving the first read request;

reading data from the second mirror of the data volume in response to receiving the

    first read request;

returning the data read from the first mirror to the computer system;

storing the data read from the second mirror into a cache memory;

receiving a second read request from the computer system, wherein the second read request is received subsequent to the first read request, and wherein the first and second read requests are for the same data;

returning data stored in the cache memory in response to receiving the second read request.